§71.88

- (f) The package has been loaded and closed in accordance with written procedures;
- (g) For fissile material, any moderator or neutron absorber, if required, is present and in proper condition;
- (h) Any structural part of the package that could be used to lift or tie down the package during transport is rendered inoperable for that purpose, unless it satisfies the design requirements of §71.45;
- (i) The level of non-fixed (removable) radioactive contamination on the external surfaces of each package offered for shipment is as low as reasonably achievable, and within the limits specified in DOT regulations in 49 CFR 173.443:
- (j) External radiation levels around the package and around the vehicle, if applicable, will not exceed the limits specified in §71.47 at any time during transportation; and
- (k) Accessible package surface temperatures will not exceed the limits specified in §71.43(g) at any time during transportation.

§ 71.88 Air transport of plutonium.

- (a) Notwithstanding the provisions of any general licenses and notwithstanding any exemptions stated directly in this part or included indirectly by citation of 49 CFR chapter I, as may be applicable, the licensee shall assure that plutonium in any form, whether for import, export, or domestic shipment, is not transported by air or delivered to a carrier for air transport unless:
- (1) The plutonium is contained in a medical device designed for individual human application; or
- (2) The plutonium is contained in a material in which the specific activity is not greater than 0.002 μ Ci/g (70 Bq/g) of material and in which the radioactivity is essentially uniformly distributed; or
- (3) The plutonium is shipped in a single package containing no more than an A_2 quantity of plutonium in any isotope or form, and is shipped in accordance with §71.5; or
- (4) The plutonium is shipped in a package specifically authorized for the shipment of plutonium by air in the

Certificate of Compliance for that package issued by the Commission.

- (b) Nothing in paragraph (a) of this section is to be interpreted as removing or diminishing the requirements of §73.24 of this chapter.
- (c) For a shipment of plutonium by air which is subject to paragraph (a)(4) of this section, the licensee shall, through special arrangement with the carrier, require compliance with 49 CFR 175.704, U.S. Department of Transportation regulations applicable to the air transport of plutonium.

§ 71.89 Opening instructions.

Before delivery of a package to a carrier for transport, the licensee shall ensure that any special instructions needed to safely open the package have been sent to, or otherwise made available to, the consignee for the consignee's use in accordance with 10 CFR 20.1906(e).

$\S 71.91$ Records.

- (a) Each licensee shall maintain, for a period of 3 years after shipment, a record of each shipment of licensed material not exempt under §71.10, showing where applicable—
- (1) Identification of the packaging by model number and serial number;
- (2) Verification that there are no significant defects in the packaging, as shipped;
- (3) Volume and identification of coolant;
- (4) Type and quantity of licensed material in each package, and the total quantity of each shipment;
- (5) For each item of irradiated fissile material—
- (i) Identification by model number and serial number:
- (ii) Irradiation and decay history to the extent appropriate to demonstrate that its nuclear and thermal characteristics comply with license conditions; and
- (iii) Any abnormal or unusual condition relevant to radiation safety;
 - (6) Date of the shipment;
- (7) For fissile packages and for Type B packages, any special controls exercised:
- (8) Name and address of the transferee;

- (9) Address to which the shipment was made: and
- (10) Results of the determinations required by §71.87 and by the conditions of the package approval.
- (b) The licensee shall make available to the Commission for inspection, upon reasonable notice, all records required by this part. Records are only valid if stamped, initialed, or signed and dated by authorized personnel or otherwise authenticated.
- (c) The licensee shall maintain sufficient written records to furnish evidence of the quality of packaging. The records to be maintained include results of the determinations required by §71.85; design, fabrication, and assembly records, results of reviews, inspections, tests, and audits; results of monitoring work performance and materials analyses; and results of maintenance, modification and repair activities. Inspection, test, and audit records must identify the inspector or data recorder, the type of observation, the results, the acceptability and the action taken in connection with any deficiencies noted. The records must be retained for three years after the life of the packaging to which they apply.

§ 71.93 Inspection and tests.

- (a) The licensee or certificate holder shall permit the Commission, at all reasonable times, to inspect the licensed material, packaging, premises, and facilities in which the licensed material or packaging is used, provided, constructed, fabricated, tested, stored, or shipped.
- (b) The licensee shall perform, and permit the Commission to perform, any tests the Commission deems necessary or appropriate for the administration of the regulations in this chapter.
- (c) The licensee shall notify the Administrator of the appropriate NRC Regional Office listed in appendix A of part 73 of this chapter, at least 45 days before fabrication of a package to be used for the shipment of licensed material having a decay heat load in excess of 5 kW or with a maximum normal operating pressure in excess of 103 kPa (15 lbf/in2) gauge.

§71.95 Reports.

The licensee shall report to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 30 days-

(a) Any instance in which there is significant reduction in the effectiveness of any approved Type B, or fissile,

packaging during use;

- (b) Details of any defects with safety significance in Type B, or fissile, packaging after first use, with the means employed to repair the defects and prevent their recurrence: or
- (c) Instances in which the conditions of approval in the certificate of compliance were not observed in making a shipment.

§71.97 Advance notification of shipment of irradiated reactor fuel and nuclear waste.

- (a) As specified in paragraphs (b), (c) and (d) of this section, each licensee shall provide advance notification to the governor of a State, or the governor's designee, of the shipment of licensed material, through, or across the boundary of the State, before the transport, or delivery to a carrier, for transport, of licensed material outside the confines of the licensee's plant or other place of use or storage.
- (b) Advance notification is required under this section for shipments of irradiated reactor fuel in quantities less than that subject to advance notification requirements of §73.37(f) of this chapter. Advance notification is also required under this section for shipment of licensed material, other than irradiated fuel, meeting the following three conditions:
- (1) The licensed material is required by this part to be in Type B packaging for transportation;
- (2) The licensed material is being transported to or across a State boundary en route to a disposal facility or to a collection point for transport to a disposal facility; and

(3) The quantity of licensed material in a single package exceeds the least of

the following:

(i) 3000 times the A₁ value of the radionuclides as specified in appendix A, Table A-1 for special form radioactive material;